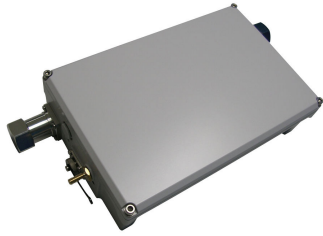


# E15R05P02

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## Tower Mounted Amplifier, Single GSM/UMTS 900 with AISG

### **OBSOLETE**

This product was discontinued on: December 31, 2023

#### Replaced By:

E16R01P97

Tower Mounted Amplifier, Dual GSM/UMTS 900 with AISG

## Product Classification

**Product Type** 1-BTS:1-ANT (Uniplex) | Tower mounted amplifier

## General Specifications

**Color** Gray

**Modularity** 1-Single

**Mounting** Pole | Wall

**Mounting Pipe Hardware** Band clamps (2)

**RF Connector Interface** 7-16 DIN Female

**RF Connector Interface Body Style** Long neck

## Dimensions

**Height** 260 mm | 10.236 in

**Width** 170 mm | 6.693 in

**Depth** 71 mm | 2.795 in

**Ground Screw Diameter** 8 mm | 0.315 in

**Mounting Pipe Diameter Range** 40–160 mm

## Electrical Specifications

**License Band, LNA** CEL 900

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## Electrical Specifications, dc Power/Alarm

<b>Lightning Surge Current</b>	10 kA
<b>Lightning Surge Current Waveform</b>	8/20 waveform
<b>Operating Current at Voltage</b>	105 mA @ 12 Vdc
<b>Operating Current Tolerance</b>	±20 mA
<b>Voltage</b>	7–30 Vdc
<b>Alarm Current, CWA Mode</b>	185 mA ±10 mA

## Electrical Specifications, AISG

<b>AISG Connector</b>	8-pin DIN Female
<b>AISG Connector Standard</b>	IEC 60130-9
<b>Protocol</b>	AISG 1.1
<b>Voltage, AISG Mode</b>	10–30 Vdc

## Electrical Specifications

<b>Sub-module</b>	<b>1</b>
<b>Branch</b>	1
<b>Port Designation</b>	ANT
<b>License Band</b>	CEL 900, LNA
<b>Return Loss - Bypass Mode, typical, dB</b>	14
<b>TX Band Rejection, minimum, dB</b>	80

## Electrical Specifications Rx (Uplink)

<b>Frequency Range, MHz</b>	<b>880–915</b>
<b>Bandwidth, MHz</b>	35
<b>Gain, nominal, dB</b>	12
<b>Gain Tolerance, dB</b>	±1
<b>Noise Figure, maximum, dB</b>	1.6
<b>Noise Figure, typical, dB</b>	1.3
<b>Group Delay Variation, maximum, ns</b>	60
<b>Group Delay Variation Bandwidth, MHz</b>	5
<b>Total Group Delay, maximum,</b>	200

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ns

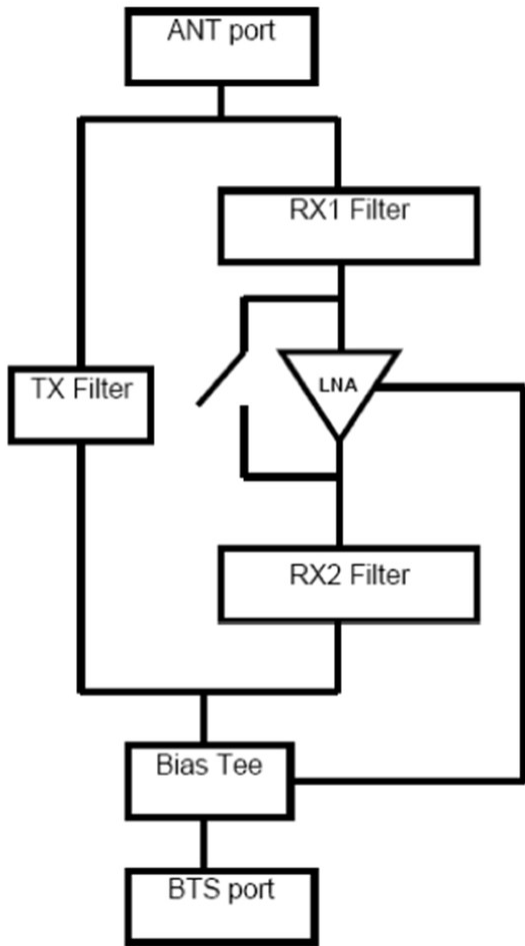
<b>Output IP3, minimum, dBm</b>	22
<b>Return Loss, minimum, dB</b>	18
<b>Insertion Loss - Bypass Mode, typical, dB</b>	3

## Electrical Specifications Tx (Downlink)

<b>Frequency Range, MHz</b>	<b>925–960</b>
<b>Bandwidth, MHz</b>	35
<b>Insertion Loss, maximum, dB</b>	0.7
<b>Insertion Loss Ripple, maximum, dB</b>	0.5
<b>Group Delay Variation, maximum, ns</b>	28
<b>Group Delay Variation Bandwidth, MHz</b>	5
<b>Total Group Delay, maximum, ns</b>	78
<b>Return Loss, minimum, dB</b>	18
<b>RX Band Rejection, minimum, dB</b>	40
<b>Input Power, RMS, maximum, W</b>	200
<b>Input Power, PEP, maximum, W</b>	5000
<b>3rd Order PIM, maximum, dBc</b>	-159
<b>3rd Order PIM Test Method</b>	Two +43 dBm carriers

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## Block Diagram



## Material Specifications

**Finish** Painted

## Environmental Specifications

**Operating Temperature** -40 °C to +65 °C (-40 °F to +149 °F)

**Relative Humidity** Up to 100%

**Corrosion Test Method** IEC 60068-2-11, 30 days

**Ingress Protection Test Method** IEC 60529:2001, IP67

## Packaging and Weights

# E15R05P02

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**Included** Mounting hardware

**Weight, net** 4.5 kg | 9.921 lb

## Regulatory Compliance/Certifications

**Agency**

ISO 9001:2015



**Classification**

Designed, manufactured and/or distributed under this quality management system

## \* Footnotes

**License Band, LNA** License Bands that have RxUplink amplification